

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 11:09:43 ON 15 FEB 2007

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 11:09:52 ON 15 FEB 2007

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STRUCTURE FILE UPDATES: 14 FEB 2007 HIGHEST RN 921041-62-5

DICTIONARY FILE UPDATES: 14 FEB 2007 HIGHEST RN 921041-62-5

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TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> E "AZELAIC ACID"/CN 25

E1	1	AZELAHYDROXAMIC ACID, IRON COMPLEX/CN
E2	1	AZELAHYDROXIMIC ACID/CN
E3	1 -->	AZELAIC ACID/CN
E4	1	AZELAIC ACID ALDEHYDE METHYL ESTER/CN
E5	1	AZELAIC ACID ANHYDRIDE POLYMER/CN
E6	1	AZELAIC ACID BARIUM SALT/CN
E7	1	AZELAIC ACID BIS((1-METHYLCYCLOHEXYL)METHYL) ESTER/CN
E8	1	AZELAIC ACID BIS(2,4-DINITROPHENYLHYDRAZIDE)/CN
E9	1	AZELAIC ACID BIS(PHENYLHYDRAZIDE)/CN
E10	1	AZELAIC ACID BIS(TETRAETHYLAMMONIUM) SALT/CN
E11	1	AZELAIC ACID CHITOSAN SALT/CN
E12	1	AZELAIC ACID CHLORIDE/CN
E13	1	AZELAIC ACID CIS-1,4-CYCLOHEXANEDIMETHYLAMINE SALT (1:1)/CN
E14	1	AZELAIC ACID DI(2-ETHYLHEXYL) ESTER/CN
E15	1	AZELAIC ACID DICHLORIDE/CN
E16	1	AZELAIC ACID DIHYDRAZIDE-DIBUTYLTIN DICHLORIDE POLYMER/CN
E17	1	AZELAIC ACID DIHYDRAZIDE-ETHYLENE GLYCOL-MALEIC ANHYDRIDE-PHTHALIC ANHYDRIDE COPOLYMER/CN
E18	1	AZELAIC ACID DIHYDRAZIDE-PHENYLPHOSPHONIC DIISOCYANATE COPOLYMER/CN
E19	1	AZELAIC ACID DILITHIUM SALT/CN
E20	1	AZELAIC ACID ETHANOLAMINE SALT/CN
E21	1	AZELAIC ACID HEXAMETHYLENEDIAMINE SALT-E-CAPROLACTAM COPOLYMER/CN
E22	1	AZELAIC ACID ION(1-)/CN
E23	1	AZELAIC ACID ION(2-)/CN
E24	1	AZELAIC ACID LYSINE SALT/CN
E25	1	AZELAIC ACID MONOAMIDE WITH MONO-6-DEOXY-6-AMINO-B-CYCLODEXTRIN O-PERACETATE MONOESTER WITH N-HYDROXYSUCCINIMIDE/CN

=> S E3

L1 1 "AZELAIC ACID"/CN

=> DIS L1 1 IDE

L1 ANSWER 1 OF 1. REGISTRY COPYRIGHT 2007 ACS on STN

RN 123-99-9 REGISTRY

ED Entered STN: 16 Nov 1984

CN Nonanedioic acid (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Azelaic acid (8CI)

OTHER NAMES:

CN 1,7-Dicarboxyheptane

CN 1,7-Heptanedicarboxylic acid

CN 1,9-Nonanedioic acid

CN Anchoic acid

CN Emerox 1144

CN Emery 1110

CN Empol 1144

CN Lepargylic acid

CN n-Nonanedioic acid

CN NSC 19493

CN Skinoren

CN ZK 62498

MF C9 H16 O4

CI COM

LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, IFICDB, IFIPAT, IFIUDB, IMSDRUGNEWS, IMSRESEARCH, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, PHAR, PIRA, PROMT, PROUSDDR, PS, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*, WHO

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

HO<sub>2</sub>C-(CH<sub>2</sub>)<sub>7</sub>-CO<sub>2</sub>H

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3620 REFERENCES IN FILE CA (1907 TO DATE)

562 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

3627 REFERENCES IN FILE CAPLUS (1907 TO DATE)

4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

7.35

7.56

FILE 'CAPLUS' ENTERED AT 11:10:36 ON 15 FEB 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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FILE COVERS 1907 - 15 Feb 2007 VOL 146 ISS 8  
FILE LAST UPDATED: 14 Feb 2007 (20070214/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s 123-99-9 or azelaic(a)acid

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L3 3627 L2

5134 AZELAIC

4314120 ACID

1568872 ACIDS

4815460 ACID

(ACID OR ACIDS)

4614 AZELAIC(A)ACID

L4 5718 L3 OR AZELAIC(A)ACID

=> s steroid(a)hormone

112215 STERIOD

113493 STEROIDS

170839 STERIOD

(STERIOD OR STEROIDS)

285401 HORMONE

215721 HORMONES

396473 HORMONE

(HORMONE OR HORMONES)

L5 19033 STERIOD(A)HORMONE

=> s l4 and l5

L6 0 L4 AND L5

=> s corticosteroid

22346 CORTICOSTERIOD

44334 CORTICOSTEROIDS

L7 50452 CORTICOSTERIOD

(CORTICOSTERIOD OR CORTICOSTEROIDS)

=> s l4 and l7

L8 29 L4 AND L7

=> s l4(p)l7

L9 0 L4(P)L7

=> s l8 ti au so py 1-29

MISSING OPERATOR L8 TI

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s ti au so py 1-29 l8

MISSING OPERATOR 1-29 L8

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s l4 and l7

L10 29 L4 AND L7

=> d ti au so py 1-29

L10 ANSWER 1 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Antibiotic kit and compositions

IN Friedman, Doron; Besonov, Alex; Tamarkin, Dov; Eini, Meir

SO U.S. Pat. Appl. Publ., 31pp., Cont.-in-part of U.S. Ser. No. 532,618.  
CODEN: USXXCO

PY 2006

2004

2004

2005

2006

L10 ANSWER 2 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Controlled release implant comprising biocompatible polymer for ocular delivery

IN Dadey, Eric; Lindemann, Christopher M.; Warren, Stephen L.; Norton, Richard L.

SO U.S. Pat. Appl. Publ., 36pp.

CODEN: USXXCO

PY 2006

L10 ANSWER 3 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Film forming foamable pharmaceutical and cosmetic compositions and cosmetic and therapeutic uses thereof

IN Tamarkin, Dov; Friedman, Doron; Eini, Meir

SO U.S. Pat. Appl. Publ., 20pp., Cont.-in-part of U.S. Ser. No. 922,358.  
CODEN: USXXCO

PY 2006

2004

2004

2005

2005

L10 ANSWER 4 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Granulysin peptides and methods of use thereof

IN Kim, Jenny J.

SO PCT Int. Appl., 40pp.

CODEN: PIXXD2

PY 2006

2007

L10 ANSWER 5 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Method and device for ophthalmic administration of active pharmaceutical ingredients

IN Gross, Yossi; Herzog, Rafi; Koevary, Steven B.

SO PCT Int. Appl., 127pp.

CODEN: PIXXD2

PY 2006

2007

L10 ANSWER 6 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Pharmaceutical compositions comprising o-acetylsalicyl derivatives of  
 amino saccharides and amino acids  
 IN Yu, Ruey J.; Van Scott, Eugene J.  
 SO PCT Int. Appl., 56 pp.  
 CODEN: PIXXD2  
 PY 2006  
 2006

L10 ANSWER 7 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Novel dosage form comprising modified-release and immediate-release active  
 ingredients  
 IN Vaya, Navin; Karan, Rajesh Singh; Sadanand, Sunil; Gupta, Vinod Kumar  
 SO U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Ser. No. 630,446.  
 CODEN: USXXCO  
 PY 2006  
 2004  
 2004

L10 ANSWER 8 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Bioavailability and improved delivery of alkaline pharmaceutical drugs  
 IN Yu, Ruey J.; Van Scott, Eugene J.  
 SO U.S. Pat. Appl. Publ., 16 pp., Cont.-in-part of U.S. Ser. No. 792,273.  
 CODEN: USXXCO  
 PY 2005  
 2004  
 2006

L10 ANSWER 9 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Dermal drug delivery system  
 IN Brown, Marc Barry; Martin, Gary Peter  
 SO PCT Int. Appl., 53 pp.  
 CODEN: PIXXD2  
 PY 2005  
 2005  
 2006

L10 ANSWER 10 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Enlargement of mucocutaneous or cutaneous organs and sites with topical  
 compositions containing N-acyl-aldosamine or N-acylamino acid compounds  
 IN Yu, Ruey J.; Van Scott, Eugene J.  
 SO PCT Int. Appl., 52 pp.  
 CODEN: PIXXD2  
 PY 2005  
 2004  
 2005

L10 ANSWER 11 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Penetrating pharmaceutical foam  
 IN Tamarkin, Dov; Friedman, Doron; Eini, Meir  
 SO PCT Int. Appl., 68 pp.  
 CODEN: PIXXD2  
 PY 2005  
 2005  
 2005  
 2005  
 2006  
 2006  
 2006

L10 ANSWER 12 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Method for the treatment or prevention of dermatological disorders with a  
 cyclooxygenase-2 inhibitor alone and in combination with a dermatological

treatment agent and compositions therewith  
 IN Pulaski, Steven P.  
 SO U.S. Pat. Appl. Publ., 68 pp.  
 CODEN: USXXCO  
 PY 2005  
 2005  
 2005

L10 ANSWER 13 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Transdermal delivery system for cosmetic agents  
 IN Levin, Galit; Sacks, Hagit; Rudaev, Sergey  
 SO PCT Int. Appl., 45 pp.  
 CODEN: PIXXD2  
 PY 2004  
 2005

L10 ANSWER 14 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Compositions and methods for treatment of rosacea  
 IN Patt, Leonard M.  
 SO U.S. Pat. Appl. Publ., 11 pp.  
 CODEN: USXXCO  
 PY 2004  
 2005  
 2005  
 2005  
 2005  
 2006  
 2005

L10 ANSWER 15 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Pharmaceutical preparation useful for treating tumors and lesions of the  
 skin and the mucous membranes and methods and kits using same  
 IN Burstein, Pinchas  
 SO U.S. Pat. Appl. Publ., 35 pp., Cont.-in-part of U.S. Ser. No. 968,771.  
 CODEN: USXXCO  
 PY 2004  
 2003  
 2006  
 2003  
 2004

L10 ANSWER 16 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Novel conjugate compounds and dermatological compositions thereof  
 IN Tamarkin, Dov  
 SO U.S. Pat. Appl. Publ., 18 pp.  
 CODEN: USXXCO  
 PY 2004

L10 ANSWER 17 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Acidic drug complexes for improved bioavailability and delivery  
 IN Yu, Ruey J.; Van Scott, Eugene J.  
 SO PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2  
 PY 2004  
 2004  
 2004  
 2004  
 2004  
 2005

L10 ANSWER 18 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Improved bioavailability and improved delivery of alkaline drugs  
 IN Yu, Ruey J.; Van Scott, Eugene J.  
 SO PCT Int. Appl., 41 pp.

CODEN: PIXXD2

PY 2004  
2004  
2004  
2004  
2005

L10 ANSWER 19 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI N-Acetyl cysteine and its topical use

IN Yu, Ruey J.; Van Scott, Eugene J.

SO U.S. Pat. Appl. Publ., 8 pp., Cont.-in-part of U.S. Pat. Appl. 2003  
198,656.

CODEN: USXXCO

PY 2003  
2000  
2005  
2005  
2006  
2003  
2003  
2004

L10 ANSWER 20 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Urea compositions for the treatment of skin disorders

IN Yu, Ruey J.; Van Scott, Eugene J.

SO PCT Int. Appl., 39 pp.

CODEN: PIXXD2

PY 2003  
2004  
2003  
2003  
2004  
2005

L10 ANSWER 21 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Topical pharmaceuticals for the treatment of inflammatory dermatoses

IN Maibach, Howard I.; Luo, Eric C.; Hsu, Tsung-Min

SO U.S. Pat. Appl. Publ., 18 pp., Cont.-in-part of U.S. Ser. No. 972,008.

CODEN: USXXCO

PY 2003  
2001  
2003  
2002  
2004  
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2003  
2003  
2003  
2004  
2005

L10 ANSWER 22 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Methods and trefoil peptide compositions for treating dermal lesions

IN Podolsky, Daniel K.

SO PCT Int. Appl., 47 pp.

CODEN: PIXXD2

PY 2003  
2003  
2003  
2004  
2005  
2005

L10 ANSWER 23 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Pharmaceutical preparations useful for treating tumors and lesions of the skin and the mucous membranes and methods and kits using same  
 IN Burstein, Pinchas  
 SO PCT Int. Appl., 67 pp.  
 CODEN: PIXXD2  
 PY 2003  
 2004  
 2003  
 2006  
 2003  
 2004  
 2004

L10 ANSWER 24 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Pharmaceutical and cosmetic compositions containing oligosaccharide aldonic acids and their topical use  
 IN Yu, Ruey J.; Van Scott, Eugene J.  
 SO PCT Int. Appl., 86 pp.  
 CODEN: PIXXD2  
 PY 2001  
 2001  
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L10 ANSWER 25 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Topical delivery systems for active agents  
 IN Niemiec, Susan M.; Wang, Jonas C. T.; Wisniewski, Stephen J.; Stenn, Kurt S.; Lu, Gwang Wei  
 SO PCT Int. Appl., 56 pp.  
 CODEN: PIXXD2  
 PY 2000  
 2000  
 2001  
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 2003  
 2002  
 2002

L10 ANSWER 26 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Pyridine thiols reverse mucocutaneous aging  
 IN Thornfeldt, Carl R.  
 SO PCT Int. Appl., 21 pp.  
 CODEN: PIXXD2  
 PY 1998  
 2000  
 1998  
 2002



L10 ANSWER 27 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Biologically active stick composition  
IN Lindahl, Ake; Bryland, Rickard  
SO PCT Int. Appl., 21 pp.  
CODEN: PIXXD2

PY 1997  
1997  
2007  
1997  
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2006  
2005

L10 ANSWER 28 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Topical pharmaceutical preparation containing glycerol nitrate as  
penetration enhancer  
IN Dannhardt, G.; Dunzendorfer, Udo  
SO Ger. Offen., 4 pp.  
CODEN: GWXXBX

PY 1993

L10 ANSWER 29 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Alkylation of brain corticosteroid acetyltransferase by  
17-hydroxyprogesterone-17-(9-oxo-10-chlorodecanoate) and related compounds  
AU Purdy, Robert H.; Rao, P. Narasimha; Zoeller, Jerome H., Jr.  
SO Steroids (1973), 22(1), 139-50  
CODEN: STEDAM; ISSN: 0039-128X

PY 1973

=> s vitamin(a)e or vitamin(a)d  
196450 VITAMIN  
56496 VITAMINS  
218415 VITAMIN  
(VITAMIN OR VITAMINS)  
2004621 E  
34778 VITAMIN(A)E  
196450 VITAMIN  
56496 VITAMINS  
218415 VITAMIN  
(VITAMIN OR VITAMINS)

2411660 D  
27208 VITAMIN(A)D  
L11 59834 VITAMIN(A)E OR VITAMIN(A)D

=> d his

(FILE 'HOME' ENTERED AT 11:09:43 ON 15 FEB 2007)

FILE 'REGISTRY' ENTERED AT 11:09:52 ON 15 FEB 2007  
E "AZELAIC ACID"/CN 25

L1 1 S E3

FILE 'CAPLUS' ENTERED AT 11:10:36 ON 15 FEB 2007  
S 123-99-9/REG# OR AZELAIC(A)ACID

FILE 'REGISTRY' ENTERED AT 11:11:42 ON 15 FEB 2007  
L2 1 S 123-99-9/RN

FILE 'CAPLUS' ENTERED AT 11:11:42 ON 15 FEB 2007

L3 3627 S L2  
L4 5718 S L3 OR AZELAIC(A)ACID  
L5 19033 S STEROID(A)HORMONE  
L6 0 S L4 AND L5  
L7 50452 S CORTICOSTEROID  
L8 29 S L4 AND L7  
L9 0 S L4(P)L7  
L10 29 S L4 AND L7  
L11 59834 S VITAMIN(A)E OR VITAMIN(A)D

=> s l4 ans l11

MISSING OPERATOR L4 ANS

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> d l4 and l11

L11 IS NOT VALID HERE

For an explanation, enter "HELP DISPLAY".

=> s l4 and l11

L12 72 L4 AND L11

=> s l4(p)l11

L13 6 L4(P)L11

=> d ti au abs so py 1-6

L13 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

TI Cosmetic composition comprising hydrophobic and hydrophilic silica particles

IN Ingman, Dov

AB The present invention relates to a new topical cosmetic composition formulated for concealing wrinkles and for eliminating or reducing damages to the skin appearance resulted from a wide variety of disorders, such as for example, acne. The composition comprises water, optionally containing 25 to

400

ppm of Ag, hydrophobic particles, preferably hydrophobic silica, having a diameter, ranged from about 5 to about 150 nm, and/or hydrophilic particles, preferably hydrophilic silica, having a diameter, ranged from about 5 to about 150 nm and a soluble electrolyte, capable of releasing free ions in an aqueous environment. Thus, a hypotonic composition for treating acne comprised Dead Sea salt 0.2, zinc sulfate 1, hydrophobic silica 5, hydrophilic silica 5, tea tree oil 2, sea buckthorn oil 3, vitamin A 0.1, vitamin C 1.5, vitamin E acetate 0.1, methylparaben 0.1, propylene glycol 2, and water 80%, resp. A composition comprising water, optionally containing Ag 25 to 400 ppm, 10 weight% Aerosil 380, 2.5 weight%

Aerosil

R812, 1 to 20 weight% Dead Sea salt, and optionally one or more conventional skincare and/or anti-acne agent, selected from evening primrose oil, sweet almond oil, sea buckthorn oil, tea tree oil, Finsolv TN, (C12-15 alkyl benzoate), octyl hydroxystearate, salicylic acid, vitamin C, citric acid, azelaic acid, benzoyl peroxide, zinc acetate and sulfur. The composition was highly effective in treating acne. The concentration of the salt in such composition was determined according to

the treated

skin type (dried, oily, etc.) and the particular acne type, grade and state of the treated individual. Compns. containing higher concns. of salt (10 to 20 weight%) are preferred for treating an oily skin and an intensive acne state.

SO Eur. Pat. Appl., 30 pp.

CODEN: EPXXDW

PY 2006

2006

- L13 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Use of N,N1-bis(2-hydroxyethyl)nonandiamide as a cosmetic agent
- IN Comelli, Cristina; Della Valle, Maria Federica; Della Valle, Francesco; Marcolongo, Gabriele
- AB The present invention relates to the use of N,N1-bis(2-hydroxyethyl)nonandiamide, the common international name of which is adelmidrol, as a cosmetic agent for use on skin and/or mucous membranes which are irritable and/or are subject to acute irritation, in man and in animals. The present invention also relates to a method for the preparation of N,N1-bis(2-hydroxyethyl)nonandiamide, comprising the reaction of azelaic acid or of a diester thereof with ethanolamine in an inert atmospheric, possibly on the presence of an inert solvent. This method enables adelmidrol to be produced in a particularly pure form suitable for its use in the cosmetic field. A face or body cream containing adelmidrol 2, vitamin E acetate 4, sodium hyaluronate 0.04, bronopol 0.005, hydrogenated castor oil 40 1.5, noveon AA1 1.6, o-phenylphenol 0.18, aroma 0.15, and water q.s. to 100 % was prepared
- SO PCT Int. Appl., 29 pp.  
CODEN: PIXXD2
- PY 2001  
2002  
2005  
2005  
2005  
2005
- L13 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Blood antioxidant status and urinary levels of catecholamine metabolites in  $\beta$ -thalassemia
- AU De Luca, Chiara; Filosa, Aldo; Grandinetti, Mauro; Maggio, Francesco; Lamba, Marta; Passi, Siro
- AB It has been reported that iron overload in  $\beta$ -thalassemia leads to an enhanced generation of reactive oxygen species and to oxidative stress. We have studied the oxidant/antioxidant imbalance in the blood of 48 transfusion-dependent  $\beta$ -thalassemic patients (TLP) (17 males, 31 females, 11-22 yr), under chelation therapy, and in 40 sex and age matched healthy controls (CTR). Plasma and lymphocyte levels of vitamin E (Vit E), ubiquinol (CoQ10H2), ubiquinone (CoQ10), plasma concns. of vitamin A (Vit A),  $\beta$ -carotene, lycopene, vitamin C (Vit C), total thiols, fatty acid patterns of phospholipids (PL-FA), and plasma and urinary markers of lipoperoxidn. (TBA-RM), conjugated dienes, and azelaic acid (AZA), as well as the urinary levels of catecholamine and serotonin metabolites, were evaluated by gas chromatog.-mass spectrometry (GC-MS), HPLC and spectrophotometry. Routine laboratory blood analyses were performed on the same samples; 39/48 TLP were
- HCV pos. Blood samples were collected just before transfusion, the 24 h urine samples the day before. Our results clearly showed that a severe oxidative stress occurs in the plasma of TLP in comparison with CTR. In fact, the levels of lipophilic antioxidants and ascorbate were severely depleted: CoQ10H2 (-62.5%), total CoQ10 (-35.1%), Vit E (-43.8%),  $\beta$ -carotene (-31.1%), lycopene (-63.7%), Vit A (-35.9%), Vit C (-23.1%). The impairment of the antioxidant status was associated with elevated plasma levels of byproducts of lipoperoxidn. and urinary concns. of catecholamine metabolites and of AZA, indicating a high degree of both neurol. stress and lipoperoxidn. A significant pos. correlation was found between vitamin E and non-transferrin-bound iron (NTBI) ( $r = -0.81$ ;  $p < 0.001$ ), while no correlation was found between antioxidant depletion and ferritin serum levels, average blood consumption, or the presence of clin. complications. The administration of selective antioxidants along with an appropriate diet might represent a promising way of counteracting oxidative damage and its deleterious effects on the

progression of the disease.

SO Free Radical Research (1999), 30(6), 453-462  
CODEN: FRARER; ISSN: 1071-5762  
PY 1999

L13 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

TI Topical formulations for treatment of acne

IN Shirane, Miyako; Egawa, Yuichiro; Maeno, Kiyoshi

AB A topical formulation contains (1)  $\geq 1$  compound selected from the group comprising succinic acid, azelaic acid, sebacic acid vitamin E derivs., and salts thereof, and (2) an agent, for microbicidal activity, selected from the group comprising S, salicylic acid, lactic acid, urea, chlorhexidine gluconate, isopropylmethylphenol, and triclosan, for the treatment of acne. Thus, a skin lotion was prepared containing succinic acid vitamin E monoester Na salt 0.5 and salicylic acid 0.05% by weight, and therapeutic activity shown.

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

PY 1991

L13 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

TI Skin-lightening cosmetics containing vitamin E esters and L-ascorbic acid derivatives

IN Shinoki, Misa; Hikima, Toshio; Maeno, Kiyoshi

AB Skin-lightening cosmetics contain vitamin E esters with azelaic acid and L-ascorbic acid sulfate salts and/or L-ascorbic acid phosphate salts. Vitamin E-azelaic acid monoester Na salt 0.5, L-ascorbic acid 2-phosphate Mg salt 0.5, polyoxyethylene hydrogenated castor oil 0.5, glycerin 5.0, EtOH 7.0, methylparaben 0.1, and H<sub>2</sub>O to 100 weight% were mixed to give a cosmetic lotion, which did not cause erythema on human skin and showed good skin-lightening effect.

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

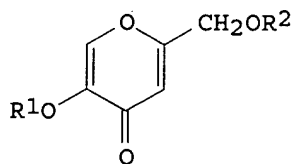
PY 1991

L13 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

TI Cosmetics with skin-lightening properties containing kojic acid derivatives and melanin synthesis-inhibiting compounds

IN Oyama, Yasuaki

GI



AB Cosmetics for topical use which have melanin synthesis-inhibiting activity comprise kojic acid or its esters (I; R<sub>1</sub>, R<sub>2</sub> = C<sub>1</sub>-20-acyl, or one of R<sub>1</sub>, R<sub>2</sub> = H and the other is C<sub>3</sub>-20-acyl) and  $\geq 1$  compds. selected from azelaic acid, tropolone, lipoic acid, sorbic acid, glucosamine, glucosamine derivs., tunicamycin, deoxynorjirimycin, glutathione, cysteine, hydroquinone, derivs. of hydroquinone, dehydroacetic acid, chelidonic acid, and lipoamide. An ointment contained polyoxyethylene (60) monostearate 1.00, polyoxyethylene (60) sorbitol tetraoleate 1.50, glycerol monostearate 1.50, bees wax 2.00, paraffin 2.00, stearic acid 3.00, behenyl alc. 3.00, shea butter 12.00, liquid paraffin 5.00, natural vitamin E 0.04, Me polysiloxane

0.01, kojic acid monobenzoate 3.00, antiseptics, fragrance, 1,3-butylene glycol 5.00, citric acid, 0.30, Na dl-lauroyl-l-glutamate 0.50, lipoic acid 2.00, and H2O to 100%. The cosmetics have skin-whitening and antisuntan properties. Kojic acid and its esters are tyrosinase inhibitors and the combination with the other particular compds. mentioned here is synergistic.

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

PY 1989

1989

1996

1989

1991

1989

1991

=>

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN  
 RN 123-99-9 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Nonanedioic acid (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Azelaic acid (8CI)  
 OTHER NAMES:  
 CN 1,7-Dicarboxyheptane  
 CN 1,7-Heptanedicarboxylic acid  
 CN 1,9-Nonanedioic acid  
 CN Anchoic acid  
 CN Emerox 1144  
 CN Emery 1110  
 CN Empol 1144  
 CN Lepargylic acid  
 CN n-Nonanedioic acid  
 CN NSC 19493  
 CN Skinoren  
 CN ZK 62498  
 MF C9 H16 O4  
 CI COM  
 LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*,  
 BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS,  
 CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM\*, DRUGU, EMBASE,  
 ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, IFICDB, IFIPAT,  
 IFIUDB, IMSDRUGNEWS, IMSRESEARCH, IPA, MEDLINE, MRCK\*, MSDS-OHS,  
 NAPRALERT, PHAR, PIRA, PROMT, PROUSDDR, PS, RTECS\*, SPECINFO, SYNTHLINE,  
 TOXCENTER, USAN, USPAT2, USPATFULL, VTB  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*, WHO  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)

HO<sub>2</sub>C--(CH<sub>2</sub>)<sub>7</sub>--CO<sub>2</sub>H

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3616 REFERENCES IN FILE CA (1907 TO DATE)  
 561 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 3625 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

acetate 3093-35-4, Halcinonide 3604-87-3, Ecdysone  
 3625-07-8, Mebolazine 3836-23-5, Norethisterone enanthate  
 4140-20-9, Estrapronicate 4705-29-7, 5 $\beta$ -Stigmastane  
 4732-76-7, Gonane 4956-37-0, Estradiol enanthate  
 5119-48-2, Withaferin a 5367-84-0, Clomegestone  
 5593-20-4, Betamethasone dipropionate 5721-91-5,  
 Testosterone decanoate 5949-44-0, Testosterone undecylate  
 6533-00-2, Norgestrel 6540-49-4, Pseudotigogenin  
 6929-17-5, 5 $\alpha$ -Cholane 6990-06-3, Fusidic acid  
 11040-28-1 13563-60-5, Norgesterone 13698-49-2,  
 Delmadinone acetate 14144-06-0, Disogluside 15262-77-8,  
 Delmadinone 15262-86-9, Testosterone isocaproate  
 15500-66-0, Pancuronium bromide 16320-04-0, Gestrinone  
 17230-88-5, Danazol 19043-95-9,  $\alpha$ -Sitostanol  
 19356-17-3, Calcidol 19888-56-3, Fluazacort 21343-40-8,  
 Ercalcidol 22298-29-9, Betamethasone 17-benzoate  
 22888-37-5, 5 $\alpha$ -Poriferastane 23290-26-8, Avenasterol  
 23983-43-9, Prasterone enanthate 25122-46-7, Clobetasol  
 17-propionate 25122-57-0, Clobetasone 17-butyrate  
 28014-46-2, Polyestradiol phosphate 28572-75-0  
 31477-60-8, Ormeloxifene 32222-06-3, Calcitriol  
 33124-50-4, Fluocortin 33396-37-1, Meproscillarlin  
 36983-69-4, Actodigin 38778-30-2, Muristerone  
 40957-83-3, Glycitein 41294-56-8 42607-12-5, Isovitamin  
 D3 50629-82-8, Halometasone 50648-94-7,  
 1,24,25-Trihydroxycholecalciferol 50897-35-3,  
 5 $\alpha$ -Campestance 54024-22-5, Desogestrel 56143-37-4  
 56720-87-7 58652-20-3, Nomegestrol acetate 58917-69-4,  
 5 $\beta$ -Campestance 59497-39-1, Naflocort 60023-92-9,  
 Roxibolone 60133-18-8, 1 $\alpha$ ,25-Dihydroxyergocalciferol  
 60282-87-3, Gestodene 62446-14-4 63819-58-9  
 65928-58-7, Dienogest 66734-13-2, Alclometasone  
 dipropionate 67332-38-1, Androstenediol 67392-87-4,  
 Drospirenone 67696-82-6, Acrihellin 69575-63-9  
 71761-06-3, Vitamin D5 72962-43-7, Brassinolide  
 73771-04-7, Prednicarbate 80373-86-0 83919-23-7,  
 Mometasone furoate 86401-95-8, Methylprednisolone  
 aceponate 87116-72-1, Timobesone 87952-98-5, Mespirenone  
 98651-66-2, Halobetasol 138126-65-5, Stigmastanol  
 375800-36-5, Chalinosterol 681126-58-9 874187-07-2  
 ROLE: THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)

(steroid kit and foamable composition)

L6 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2004:802249 CAPLUS  
 DOCUMENT NUMBER: 141:282454  
 ENTRY DATE: Entered STN: 01 Oct 2004  
 TITLE: Novel conjugate compounds and dermatological  
 compositions thereof  
 INVENTOR(S): Tamarkin, Dov  
 PATENT ASSIGNEE(S): Israel  
 SOURCE: U.S. Pat. Appl. Publ., 18 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 INT. PATENT CLASSIF.:  
 MAIN: A61K007-135  
 SECONDARY: A61K031-59; A61K031-355  
 US PATENT CLASSIF.: 424062000; 514167000; 514179000; 514458000  
 CLASSIFICATION: 62-4 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 2, 63  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004191196	A1	20040930	US 2003-737181	20031216
PRIORITY APPLN. INFO.:			US 2002-433829P	P 20021216

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004191196	ICM	A61K007-135
	ICS	A61K031-59; A61K031-355
	INCL	424062000; 514167000; 514179000; 514458000
	IPCI	A61K0007-135 [ICM,7]; A61K0031-59 [ICS,7]; A61K0031-355 [ICS,7]; A61K0031-352 [ICS,7,C*]
	IPCR	A61K0008-30 [I,C*]; A61K0008-63 [I,A]; A61K0008-67 [I,A]; A61K0031-352 [I,C*]; A61K0031-355 [I,A]; A61K0031-59 [I,A]; A61K0031-59 [I,C*]; A61Q0019-00 [I,A]; A61Q0019-00 [I,C*]; A61Q0019-02 [I,A]; A61Q0019-02 [I,C*]
	NCL	424/062.000; 514/167.000; 514/179.000; 514/458.000
	ECLA	A61K008/63; A61K008/67; A61K008/67L; A61K031/355; A61K031/59; A61K047/48H4C; A61Q019/00; A61Q019/02

ABSTRACT:

The invention relates to novel cosmetic and dermatol. compns., comprising conjugate compds., including a dicarboxylic acid moiety, which is covalently linked through covalent bonds to a biol. active alc., selected from the group of steroidal hormones, steroidal anti-inflammatory agents, vitamin E and vitamin D.

SUPPL. TERM: dicarboxylate steroid cosmetic drug skin disease

INDEX TERM: Skin, disease  
(aging, wrinkles; steroid-dicarboxylate conjugate for cosmetic and dermatol. application)

INDEX TERM: Cosmetics  
(antiaging; steroid-dicarboxylate conjugate for cosmetic and dermatol. application)

INDEX TERM: Infection  
(bacterial; steroid-dicarboxylate conjugate for cosmetic and dermatol. application)

INDEX TERM: Skin  
(cellulite; steroid-dicarboxylate conjugate for cosmetic and dermatol. application)

INDEX TERM: Cosmetics  
(creams; steroid-dicarboxylate conjugate for cosmetic and dermatol. application)

INDEX TERM: Infection  
(cutaneous; steroid-dicarboxylate conjugate for cosmetic and dermatol. application)

INDEX TERM: Carboxylic acids, biological studies  
ROLE: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(dicarboxylic, esters; steroid-dicarboxylate conjugate for cosmetic and dermatol. application)

INDEX TERM: Corticosteroids, biological studies  
ROLE: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(esters; steroid-dicarboxylate conjugate for cosmetic and dermatol. application)

INDEX TERM: Sebum  
(excess secretion of; steroid-dicarboxylate conjugate for cosmetic and dermatol. application)

INDEX TERM: Cosmetics  
Drug delivery systems  
(gels; steroid-dicarboxylate conjugate for cosmetic and dermatol. application)



INDEX TERM: Steroids, biological studies  
 ROLE: COS (Cosmetic use); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (hormones, esters; steroid-dicarboxylate conjugate for  
 cosmetic and dermatol. application)

INDEX TERM: Skin  
 (hyperkeratinization; steroid-dicarboxylate conjugate for  
 cosmetic and dermatol. application)

INDEX TERM: Skin, disease  
 (hyperpigmentation; steroid-dicarboxylate conjugate for  
 cosmetic and dermatol. application)

INDEX TERM: Skin, disease  
 (hypertrophic scar; steroid-dicarboxylate conjugate for  
 cosmetic and dermatol. application)

INDEX TERM: Skin, disease  
 (infection; steroid-dicarboxylate conjugate for cosmetic  
 and dermatol. application)

INDEX TERM: Cosmetics  
 Drug delivery systems  
 (lotions; steroid-dicarboxylate conjugate for cosmetic  
 and dermatol. application)

INDEX TERM: Skin, disease  
 (melasma; steroid-dicarboxylate conjugate for cosmetic  
 and dermatol. application)

INDEX TERM: Drug delivery systems  
 (ointments, creams; steroid-dicarboxylate conjugate for  
 cosmetic and dermatol. application)

INDEX TERM: Hormones, animal, biological studies  
 ROLE: COS (Cosmetic use); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (steroid, esters; steroid-dicarboxylate conjugate for  
 cosmetic and dermatol. application)

INDEX TERM: Acne  
 Aerosols  
 Cosmetics  
 Dermatitis  
 Foams  
 Mycosis  
 Obesity  
 Skin, disease  
 (steroid-dicarboxylate conjugate for cosmetic and  
 dermatol. application)

INDEX TERM: Skin  
 (stratum corneum, hypertrophy; steroid-dicarboxylate  
 conjugate for cosmetic and dermatol. application)

INDEX TERM: Blood vessel, disease  
 (telangiectasia; steroid-dicarboxylate conjugate for  
 cosmetic and dermatol. application)

INDEX TERM: Soaps  
 ROLE: COS (Cosmetic use); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (toilet; steroid-dicarboxylate conjugate for cosmetic and  
 dermatol. application)

INDEX TERM: Drug delivery systems  
 (topical; steroid-dicarboxylate conjugate for cosmetic  
 and dermatol. application)

INDEX TERM: 58-22-0, Testosterone  
 ROLE: BSU (Biological study, unclassified); BIOL (Biological  
 study)  
 (conversion to dihydrotestosterone; steroid-dicarboxylate  
 conjugate for cosmetic and dermatol. application)

INDEX TERM: 111-16-0D, Pimelic acid, esters 111-20-6D, Sebacic acid,  
 esters 123-99-9D, Azelaic acid, esters  
 124-04-9D, Adipic acid, esters 505-48-6D, Suberic acid,

esters 505-52-2D, 1,13-Tridecanedioic acid, esters  
821-38-5D, 1,14-Tetradecanedioic acid, esters 1406-16-2D,  
Vitamin d, esters 1406-18-4D, Vitamin e, esters  
ROLE: COS (Cosmetic use); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(steroid-dicarboxylate conjugate for cosmetic  
and dermatol. application)

L6 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:482398 CAPLUS  
DOCUMENT NUMBER: 131:254466  
ENTRY DATE: Entered STN: 04 Aug 1999  
TITLE: GC analysis of steroids, fatty acids, organic acids,  
and catecholamine metabolites with microwave  
accelerated derivatization for the diagnosis of  
metabolic disorders  
AUTHOR(S): Agatha, G.; Kauf, E.  
CORPORATE SOURCE: Dep. Pediatrics, Endocrinology Metabolism, Children's  
Hospital Jussuf Ibrahim, Univ. Jena, Jena, D-07745,  
Germany  
SOURCE: Clinical Laboratory (Heidelberg) (1999), 45(7/8),  
387-397  
CODEN: CLLAFP  
PUBLISHER: Clin Lab Publications  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
CLASSIFICATION: 9-3 (Biochemical Methods)  
Section cross-reference(s): 14

ABSTRACT:

The application of microwave irradiation is described for rapid derivatization of steroids, fatty acids, organic acids and catecholamine metabolites for the diagnosis of metabolic disorders. Microwave accelerated derivatization is rapid and complete, and the products formed under microwave irradiation are identical with the products formed under conventional reaction conditions, as evidenced by similar gas chromatog. retention times. The one-step methanolysis of lipids from plasma and erythrocytes with HCl/CH<sub>3</sub>OH (1M) using a microwave oven does not result in significant degradation of polyunsatd. fatty acids, even in the presence of oxygen. Capillary gas chromatog. profiles of steroids, organic acids and fatty acids for the clin. diagnosis of several diseases are discussed.

SUPPL. TERM: metabolic disorder microwave GC blood analysis  
INDEX TERM: Blood analysis  
Gas chromatography  
Microwave  
Urine analysis  
(GC anal. of steroids, fatty acids, organic acids, and  
catecholamine metabolites with microwave accelerated  
derivatization for the diagnosis of metabolic disorders)  
INDEX TERM: Fatty acids, analysis  
Lipids, analysis  
Steroids, analysis  
ROLE: ANT (Analyte); BSU (Biological study, unclassified);  
ANST (Analytical study); BIOL (Biological study)  
(GC anal. of steroids, fatty acids, organic acids, and  
catecholamine metabolites with microwave accelerated  
derivatization for the diagnosis of metabolic disorders)  
INDEX TERM: Nervous system  
(Refsum disease; GC anal. of steroids, fatty acids, organic  
acids, and catecholamine metabolites with microwave  
accelerated derivatization for the diagnosis of metabolic  
disorders)  
INDEX TERM: Metabolism, animal  
(disorder, glutaric aciduria type I; GC anal. of

steroids, fatty acids, organic acids, and catecholamine metabolites with microwave accelerated derivatization for the diagnosis of metabolic disorders)

INDEX TERM: Metabolism, animal  
(disorder; GC anal. of steroids, fatty acids, organic acids, and catecholamine metabolites with microwave accelerated derivatization for the diagnosis of metabolic disorders)

INDEX TERM: Catecholamines, analysis  
ROLE: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
(metabolites; GC anal. of steroids, fatty acids, organic acids, and catecholamine metabolites with microwave accelerated derivatization for the diagnosis of metabolic disorders)

INDEX TERM: Nerve, neoplasm  
(neuroblastoma; GC anal. of steroids, fatty acids, organic acids, and catecholamine metabolites with microwave accelerated derivatization for the diagnosis of metabolic disorders)

INDEX TERM: Acids, analysis  
ROLE: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
(organic; GC anal. of steroids, fatty acids, organic acids, and catecholamine metabolites with microwave accelerated derivatization for the diagnosis of metabolic disorders)

INDEX TERM: 50-23-7, Cortisol 53-02-1, Tetrahydrocortisol 53-05-4, Tetrahydrocortisone 53-41-8, Androsterone 53-42-9, Etiocholanolone 53-43-0, Dehydroepiandrosterone 55-10-7, Vanillylmandelic acid 57-10-3, Hexadecanoic acid, analysis 57-11-4, Octadecanoic acid, analysis 60-33-3, 9,12-Octadecadienoic acid (9Z,12Z)-, analysis 65-85-0, Benzoic acid, analysis 65-86-1 68-42-8, Tetrahydrocorticosterone 68-60-0, Tetrahydro-11-desoxycortisol 69-72-7, analysis 72-23-1, Dehydrocorticosterone 80-92-2, Pregnanediol 83-48-7, Stigmasterol 109-52-4, Pentanoic acid, analysis 110-15-6, Butanedioic acid, analysis 110-16-7, 2-Butenedioic acid (2Z)-, analysis 110-94-1, Pentanedioic acid 111-20-6, Decanedioic acid, analysis 112-37-8, Undecanoic acid 112-80-1, 9-Octadecenoic acid (9Z)-, analysis 112-85-6, Docosanoic acid 123-99-9, Nonanedioic acid, analysis 124-04-9, Hexanedioic acid, analysis 127-17-3, analysis 143-07-7, Dodecanoic acid, analysis 302-91-0, Allo-Tetrahydrocortisol 306-08-1, Homovanillic acid 373-49-9 463-40-1 495-69-2, Hippuric acid 506-30-9, Eicosanoic acid 506-32-1 506-37-6 516-05-2, Methylmalonic acid 516-38-1,  $\alpha$ -Cortol 516-42-7,  $\alpha$ -Cortolone 520-88-7, 16 $\alpha$ -Hydroxypregnenolone 521-13-1, Cholesterolbutyrate 544-63-8, Tetradecanoic acid, analysis 557-59-5, Tetracosanoic acid 571-20-0, 5 $\alpha$ -Androstane-3 $\beta$ ,17 $\beta$ -diol 600-63-5, AlloTetrahydrocorticosterone 667-66-3,  $\beta$ -Cortolone 901-56-4, Pregnanediol 1098-45-9, Pregnanetriol 1719-79-5, 20 $\alpha$ -Hydroxycortisol 1783-84-2 1963-03-7, Androst-5-ene-3,17-diol, (3 $\beta$ ,17 $\alpha$ )- 2313-14-6, 4,7,10,13,16-Docosapentaenoic acid 2791-29-9 3272-49-9, 11-Hydroxyetiocholanolone 4150-30-5, Androstenetriol 5561-99-9 5598-38-9 6217-54-5 6609-97-8, 17-Hydroxypregnanolone 7432-41-9 10417-94-4 14620-55-4 14721-66-5, Phytanic acid 20290-75-9 24880-40-8 24880-45-3 28874-58-0 36541-31-8 68392-85-8, 11-Oxopregnanetriol

ROLE: ANT (Analyte); BSU (Biological study, unclassified);  
ANST (Analytical study); BIOL (Biological study)  
(GC anal. of steroids, fatty acids, organic acids,  
and catecholamine metabolites with microwave accelerated  
derivatization for the diagnosis of metabolic disorders)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS  
RECORD.

REFERENCE(S): (1) Aoyama, T; Biochem Biophys Res Commun 1994, V201, P1541  
CAPLUS  
(2) Brink, H; J Lipid Res 1992, V33, P1449  
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CAPLUS  
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L6 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1994:245603 CAPLUS

DOCUMENT NUMBER: 120:245603

ENTRY DATE: Entered STN: 14 May 1994

TITLE: Dicarboxylic acid esters of steroids and vitamins

INVENTOR(S): Eugster, Carl; Eugster, Conrad Hans; Haldemann,  
Walter; Rivara, Giorgio; Zina, Giuseppe

PATENT ASSIGNEE(S): Marigen S.A., Switz.

SOURCE: Patentschrift (Switz.), 38 pp.

CODEN: SWXXAS

DOCUMENT TYPE: Patent

LANGUAGE: German

INT. PATENT CLASSIF.:

MAIN: C07J009-00

SECONDARY: C07D311-72; C07C401-00; A61K031-575

CLASSIFICATION: 32-7 (Steroids)

Section cross-reference(s): 1, 26, 30

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CH 681891	A5	19930615	CH 1991-3159	19921009
DE 4319492	A1	19940414	DE 1993-4319492	19930611
GB 2285805	A	19950726	GB 1994-882	19940118
PRIORITY APPLN. INFO.:			CH 1991-3159	A 19921009

# PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
CH 681891	ICM	C07J009-00
	ICS	C07D311-72; C07C401-00; A61K031-575
	IPCI	C07J0009-00 [ICM,5]; C07D0311-72 [ICS,5]; C07D0311-00 [ICS,5,C*]; C07C0401-00 [ICS,5]; A61K0031-575 [ICS,5]
DE 4319492	IPCI	C07C0069-34 [ICM,5]; C07C0069-602 [ICS,5]; C07C0401-00 [ICS,5]; C07C0067-08 [ICS,5]; C07C0067-14 [ICS,5]; C07C0067-00 [ICS,5,C*]; C07D0311-58 [ICS,5]; C07D0311-72 [ICS,5]; C07D0311-00 [ICS,5,C*]; C07D0303-04 [ICS,5]; C07D0303-00 [ICS,5,C*]; A61K0031-575 [ICS,5]; C07C0069-38 [ICA,5]; C07C0069-40 [ICA,5]; C07C0069-42 [ICA,5]; C07C0069-44 [ICA,5]; C07C0069-46 [ICA,5]; C07C0069-48 [ICA,5]; C07C0069-00 [ICA,5,C*]; B01F0017-00 [ICA,5]; B01F0017-02 [ICA,5]; B01F0017-08 [ICA,5]; B01F0017-00 [ICA,5,C*]; B01F0017-12 [ICA,5]; B01F0017-42 [ICA,5]
	IPCR	A61K0009-107 [I,A]; A61K0009-107 [I,C*]; A61K0009-16 [I,A]; A61K0009-16 [I,C*]; C07C0401-00 [I,A]; C07C0401-00 [I,C*]; C07D0311-00 [I,C*]; C07D0311-72 [I,A]; C07J0009-00 [I,A]; C07J0009-00 [I,C*]
GB 2285805	IPCI	C07J0009-00 [ICM,6]; C07C0401-00 [ICS,6]; C07D0311-72 [ICS,6]; C07D0311-00 [ICS,6,C*]
	IPCR	A61K0009-107 [I,A]; A61K0009-107 [I,C*]; A61K0009-16 [I,A]; A61K0009-16 [I,C*]; C07C0401-00 [I,A]; C07C0401-00 [I,C*]; C07D0311-00 [I,C*]; C07D0311-72 [I,A]; C07J0009-00 [I,A]; C07J0009-00 [I,C*]
	ECLA	A61K009/107D; A61K009/16H6F; C07C401/00; C07D311/72; C07J009/00

OTHER SOURCE(S): MARPAT 120:245603

## ABSTRACT:

Esters of saturated and unsatd. dicarboxylic acids with steroids and vitamin D and E derivs. were prepared for use as neoplasm inhibitors. Thus, bis(cholesteryl) azelaate (I) was prepared by esterifying the acid chloride with cholesterol. In a plate dilution test with PY6 polyoma virus-transformed mouse cells I was active to a dilution of 1:19.2X106.

SUPPL. TERM: dicarboxylic ester steroid vitamin; antitumor dicarboxylic ester steroid vitamin; ergosterol dicarboxylic ester prepn antitumor; antitumor; cholesterol dicarboxylic ester prepn antitumor; cholecalciferol dicarboxylic ester prepn antitumor; retinol dicarboxylic ester prepn antitumor

INDEX TERM: Neoplasm inhibitors  
(dicarboxylic acid esters of steroids and vitamins)

INDEX TERM: Steroids, preparation  
ROLE: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of dicarboxylic acid esters of)

INDEX TERM: 144338-31-8 144338-32-9 146513-06-6 153023-83-7  
153023-84-8 153023-85-9  
ROLE: BAC (Biological activity or effector, except adverse);  
BSU (Biological study, unclassified); BIOL (Biological study)

INDEX TERM: (antitumor activity of)  
123-98-8P, Azelaoyl chloride  
ROLE: SPN (Synthetic preparation); PREP (Preparation)  
(intermediate in preparation of dicarboxylic acid esters of

steroids and vitamins)

INDEX TERM: 153023-61-1P 153023-68-8P 153023-70-2P 153023-71-3P  
 153023-74-6P 153023-75-7P 153023-77-9P 153023-78-0P  
 153023-80-4P 153023-81-5P 153023-82-6P  
 ROLE: BAC (Biological activity or effector, except adverse);  
 BSU (Biological study, unclassified); SPN (Synthetic  
 preparation); THU (Therapeutic use); BIOL (Biological  
 study); PREP (Preparation); USES (Uses)  
 (preparation and antitumor activity of)

INDEX TERM: 23394-15-2P 23394-16-3P 51027-63-5P 51027-65-7P  
 65380-14-5P 65380-17-8P 65380-18-9P 143879-02-1P  
 153023-62-2P 153023-63-3P 153023-64-4P 153023-65-5P  
 153023-66-6P 153023-67-7P 153023-69-9P 153023-72-4P  
 153023-73-5P 153023-74-6P 153023-76-8P 153023-79-1P  
 153023-87-1P 153023-88-2P 153023-89-3P 153023-90-6P  
 153023-91-7P 153023-92-8P 153023-93-9P 153023-94-0P  
 153023-95-1P 153023-96-2P 153023-97-3P 153023-98-4P  
 153023-99-5P 153024-00-1P 153024-01-2P 153024-02-3P  
 153024-03-4P 153151-46-3P 153151-47-4P 153151-48-5P  
 153151-49-6P  
 ROLE: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

INDEX TERM: 50-14-6, Ergocalciferol 57-87-4, Ergosterol  
 123-99-9, Azelaic acid, reactions 5205-39-0  
 ROLE: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant, in preparation of dicarboxylic acid esters of  
 steroids and vitamins)

L6 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:52677 CAPLUS  
 DOCUMENT NUMBER: 112:52677  
 ENTRY DATE: Entered STN: 17 Feb 1990  
 TITLE: The "survival hormones": azelaic and pimelic acids,  
 suppress the stress elicited by isolation conditions  
 on the steroids and phospholipids of adult worker  
 honeybees

AUTHOR(S): Jorand, J. P.; Bounias, M.; Chauvin, R.  
 CORPORATE SOURCE: Lab. Biochim., INRA, Montfavet, F-84140, Fr.  
 SOURCE: Hormone and Metabolic Research (1989), 21(10), 553-7  
 CODEN: HMMRA2; ISSN: 0018-5043

DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 CLASSIFICATION: 12-6 (Nonmammalian Biochemistry)

ABSTRACT:  
 The kinetics of abdomen, hemolymph, and thoracic muscle steroid and  
 phospholipid concns. were determined in adult worker bees kept for 0-12 h starving  
 in darkness, either grouped by 8 (controls) or strictly isolated, or isolated  
 in presence of a piece of cotton impregnated with 1 µg azelaic acid and 1  
 µg pimelic acid, the so-called survivones which restore the lifespan of  
 isolated bees. The dynamics of both steroids and phospholipids strongly  
 deviates in isolated bees relative to controls. The introduction of survivones  
 completely restored the variations of hemolymph steroids of hemolymph and  
 thorax phospholipids of isolated bees to exactly similar features as in  
 controls. The action of the lipoic hormones survivones thus involves the  
 participation of lipid metabolism

SUPPL. TERM: honeybee survival hormone isolation stress; survivone  
 isolation stress honeybee; azelaic acid isolation stress  
 honeybee; pimelate isolation stress honeybee; steroid  
 honeybee survival hormone; phospholipid honeybee survival  
 hormone

INDEX TERM: Phospholipids, biological studies  
 Steroids, biological studies  
 ROLE: BIOL (Biological study)

(of honeybee tissues, isolation stress depletion of,  
survival hormones restoration of)

INDEX TERM: Digestive tract  
Fat body  
Hemolymph  
Muscle, composition  
(phospholipids and steroids of, in isolation stress in  
honeybees, azelaic and pimelic acids effect on)

INDEX TERM: Honeybee  
(phospholipids and steroids of, isolation stress  
depletion of, survival hormones restoration of)

INDEX TERM: Stress, biological  
(isolation, phospholipids and steroids of worker  
honeybees depletion by, survival hormone restoration of)

INDEX TERM: Insect hormones and growth regulators  
ROLE: BIOL (Biological study)  
(survivones, phospholipid and steroid composition of worker  
honeybee restoration by, in isolation stress)

INDEX TERM: 111-16-0, Pimelic acid 123-99-9, Nonanedioic acid,  
biological studies  
ROLE: BIOL (Biological study)  
(phospholipid and steroid composition of worker  
honeybee restoration by, in isolation stress)

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